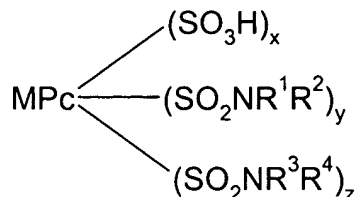




IN THE CLAIMS

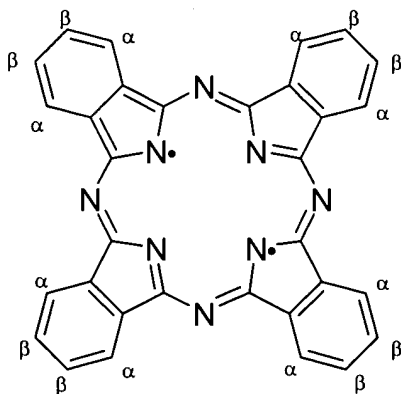
1. (currently amended): A composition comprising:
(a) a major dye component which is a mixture of phthalocyanine dyes of Formula (1) and salts thereof:



Formula (1)

wherein:

M is Cu or Ni;
Pc represents a phthalocyanine nucleus of formula;



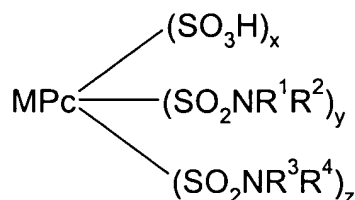
R^1 and R^2 independently are H or optionally substituted ~~C₁₋₄alkyl~~ methyl;
 R^3 is H or optionally substituted hydrocarbyl; and
 R^4 is optionally substituted hydrocarbyl; or
 R^3 and R^4 together with the nitrogen atom to which they are attached represent an optionally substituted aliphatic or aromatic ring system;
 x is 0.1 to 3.8;
 y is 0.1 to 3.8;
 z is 0.1 to 3.8;
the sum of $(x+y+z)$ is 4; and

the substituents, represented by x, y and z, are attached only to a β -position on the phthalocyanine ring; and

(b) a liquid medium which comprises water and an organic solvent or an organic solvent free from water.

2. (currently amended): A composition according to claim 1 comprising:

(a) a major dye component which is a mixture of phthalocyanine dyes of Formula (1) and salts thereof:

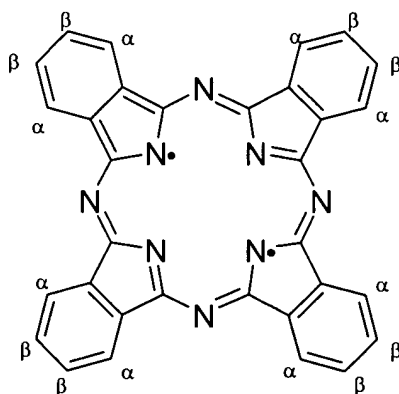


Formula (1)

wherein:

M is Cu or Ni;

Pc represents a phthalocyanine nucleus of formula;



R^1 and R^2 independently are H or optionally substituted ~~C₁₋₄alkyl~~ methyl;

R^3 is H or optionally substituted hydrocarbyl; and

R^4 is optionally substituted hydrocarbyl; or

R^3 and R^4 together with the nitrogen atom to which they are attached represent an optionally substituted aliphatic or aromatic ring system;

x is 0.1 to 3.8;

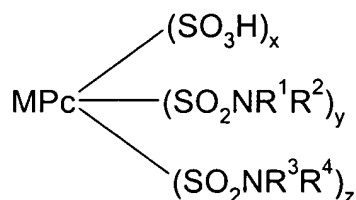
y is 0.1 to 3.8;

z is 0.1 to 3.8;

the sum of (x+y+z) is 4; and

the substituents, represented by x, y and z, are attached only to a β -position on the phthalocyanine ring and the mixture of phthalocyanine dyes of Formula (1) are obtainable by a process which comprises cyclisation of appropriate β -sulfo substituted phthalic acid, phthalonitrile, iminoisoindoline, phthalic anhydride, phthalimide or phthalamide optionally in the presence of a suitable nitrogen source (~~if required~~), a copper or nickel salt and a base followed by chlorination and then amination/amidation; and
(b) a liquid medium which comprises water and an organic solvent or an organic solvent free from water.

3. (currently amended): A composition according to either claim 1 or claim 2 comprising:
(a) a major dye component which is a mixture of phthalocyanine dyes of Formula (1) and salts thereof:

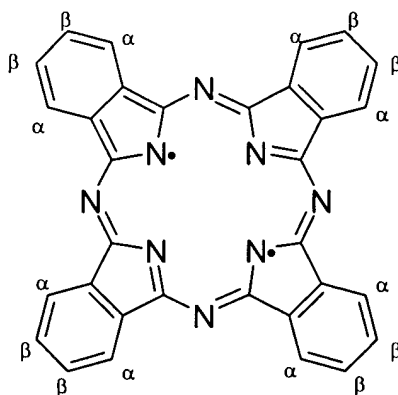


Formula (1)

wherein:

M is Cu or Ni;

Pc represents a phthalocyanine nucleus of formula;

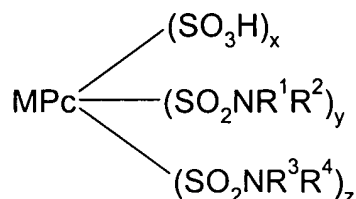


R^1 and R^2 independently are H or ~~optionally substituted C₁₋₄alkyl methyl~~;
 R^3 is H or optionally substituted hydrocarbyl; and
 R^4 is optionally substituted hydrocarbyl; or
 R^3 and R^4 together with the nitrogen atom to which they are attached represent an optionally substituted aliphatic or aromatic ring system;
x is 0.1 to 3.8;
y is 0.1 to 3.8;
z is 0.1 to 3.8;
the sum of (x+y+z) is 4; and

the substituents, represented by x, y and z, are attached only to a β -position on the phthalocyanine ring and the mixture of phthalocyanine dyes of Formula (1) are obtainable by cyclisation of 4-sulfo-phthalic acid in the presence of a nitrogen source, a copper or nickel salt and a base to give phthalocyanine β -tetrasulfonic acid which is then chlorinated and the sulfonyl chloride groups so formed are reacted with compounds of formula HNR^1R^2 and HNR^3R^4 wherein R^1 , R^2 , R^3 and R^4 are as hereinbefore defined; and
(b) a liquid medium which comprises water and an organic solvent or an organic solvent free from water.

4. (currently amended): A composition according to claim 1 comprising:

(a) a mixture of phthalocyanine dyes of Formula (1) and salts thereof:



Formula (1)

wherein:

M is Cu or Ni;

Pc represents a phthalocyanine nucleus;

R^1 and R^2 independently are H or ~~optionally substituted C₁₋₄alkyl methyl~~;

R^3 is H or methyl;

R^4 is optionally substituted hydrocarbyl; or

R^3 and R^4 together with the nitrogen atom to which they are attached represent an optionally substituted aliphatic or aromatic ring system;

x is 0.1 to 3.8;

y is 0.1 to 3.8;

z is 0.1 to 3.8;

the sum of (x+y+z) is 4; and

the substituents, represented by x, y and z, are attached only to a β -position on the phthalocyanine ring and the mixture of phthalocyanine dyes of Formula (1) are obtainable by a process which comprises cyclisation of appropriate β substituted phthalic acid, phthalonitrile, iminoisoindoline, phthalic anhydride, phthalimide or phthalamide in the presence of a suitable copper or nickel salt followed by chlorination and then amination/amidation; and
(b) a medium which comprises water and an organic solvent or an organic solvent free from water.

5. (previously presented): A composition according to claim 1 or claim 2 wherein M is Cu.

6. (previously presented): A composition according to claim 1 or claim 2 wherein x has a value of 0.5 to 3.5, y has a value of 0.5 to 3.5 and z has a value of 0.5 to 3.5.

7. (previously presented): A composition according to claim 1 or claim 2 wherein R^1 , R^2 and R^3 are independently H or methyl and R^4 is optionally substituted aryl.

8. (previously presented): A composition according to claim 1 or claim 2 wherein R^4 is phenyl bearing at least one sulfo, carboxy or phosphato substituent and having further optional substituents.

9. (previously presented): A composition according to claim 1 or claim 2 wherein R^4 is phenyl bearing a single sulfo substituent.

10. (previously presented): A composition according to claim 1 or claim 2 wherein R^1 and R^2 independently are H or methyl and R^3 and R^4 together with the nitrogen atom to which they are attached represent an optionally substituted 3 to 8 membered aliphatic or aromatic ring:

11. (previously presented): A composition according to claim 1 or claim 2 wherein R^1 and R^2 independently are H or methyl, R^3 is H or optionally substituted C_{1-8} alkyl and R^4 is optionally substituted C_{1-8} alkyl.

12. (original): A composition according to claim 11 wherein R^1 and R^2 are H, R^3 is H or C_{1-4} alkyl bearing at least one acid substituent selected from the group consisting of $-SO_3H$, $-COOH$ or $-PO_3H_2$ and R^4 is C_{1-4} alkyl bearing at least one acid substituent selected from the group consisting of $-SO_3H$, $-COOH$ or $-PO_3H_2$.

13. (previously presented): A composition according to claim 1 or claim 2 wherein R^1 and R^2 are H.

14. (currently amended): A composition according to claim 11 wherein R^1 , R^2 and R^3 are H, and R^4 is $-CH_2CH_2SO_3H$ and y is less than 4.

15. (original): A composition according to claim 11 wherein R^1 is H, R^2 is CH_3 , R^3 is H and R^4 is $-CH_2CH_2SO_3H$.

16. (original): A composition according to claim 11 wherein R^1 and R^2 are CH_3 , R^3 is H and R^4 is $-CH_2CH_2SO_3H$.

17. (previously presented): A composition according to claim 1 or claim 2 wherein at least 70% by weight of the total amount of phthalocyanine dye is of Formula (1).

18. (original): A composition according to claim 17 wherein at least 90% by weight of the total amount of phthalocyanine dye is of Formula (1).

19. (previously presented): A composition according to claim 1 or claim 2 wherein the dyes of Formula(1) are free from fibre reactive groups.

20. (currently amended): A composition according to ~~claim~~ claim 1 or claim 2 which comprises:

- (a) from 0.1 to 20 parts of compounds of Formula (1); and
- (b) from 80 to 99.9 parts of a liquid medium;

wherein all parts are by weight and the number of parts of (a)+(b)=100.

21. (original): A composition according to claim 20 which comprises:

- (a) from 0.5 to 15 parts of compounds of Formula (1); and
- (b) from 85 to 99.5 parts of a liquid medium;

wherein all parts are by weight and the number of parts of (a)+(b)=100.

22. (original): A composition according to claim 20 which comprises:

(a) from 1 to 5 parts of compounds of Formula (1); and

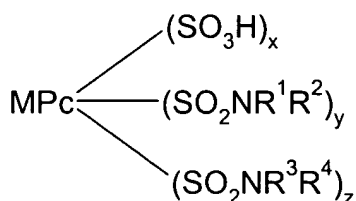
(b) from 95 to 99 parts of a liquid medium;

wherein all parts are by weight and the number of parts of (a)+(b)=100.

23. (previously presented): A composition according to claim 1 or claim 2 wherein the liquid media may contain additional components conventionally used in ink-jet printing inks.

24. (previously presented): A composition according to claim 1 or claim 2 which is an ink suitable for use in an ink-jet printer.

25. (currently amended): A mixture of dyes of Formula (4) and salts thereof:

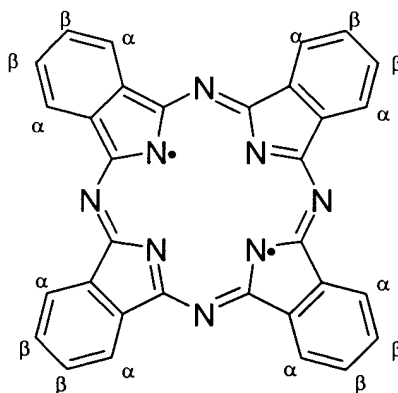


Formula (4)

wherein:

M is Cu or Ni;

Pc represents a phthalocyanine nucleus of formula;



R^1 and R^2 independently are H or optionally substituted C_{1-4} alkyl methyl;

R^3 is H or optionally substituted C_{1-8} alkyl;

R⁴ is optionally substituted C₁₋₈alkyl or phenyl bearing at least one sulfo, carboxy or phosphato substituent and having further optional substituents other than amino or substituted amino; or

R³ and R⁴ together with the nitrogen atom to which they are attached represent an optionally substituted 5- or 6-membered aliphatic or aromatic ring;

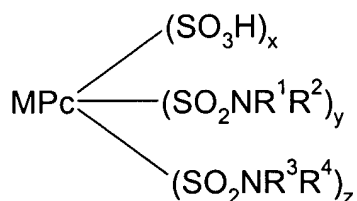
x is 0.1 to 3.8;

y is 0.1 to 3.8;

z is 0.1 to 3.8;

the sum of (x+y+z) is 4; and the substituents, represented by x, y and z, are attached only to a β-position on the phthalocyanine ring and provided that the mixture of dyes is free from fiber reactive groups.

26. (currently amended): A mixture of dyes according to claim 25 of Formula (4) and salts thereof:

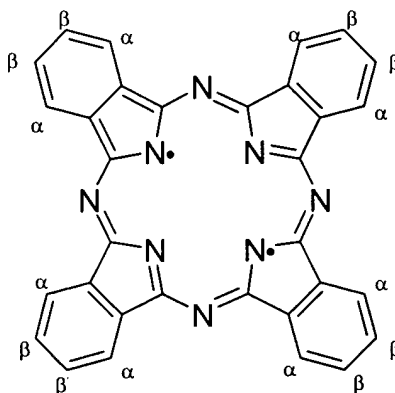


Formula (4)

wherein:

M is Cu or Ni;

Pc represents a phthalocyanine nucleus of formula;



R¹ and R² independently are H or ~~optionally substituted C₁₋₄alkyl~~ methyl;

R³ is H or optionally substituted C₁₋₈alkyl;

R^4 is optionally substituted C_{1-8} alkyl or phenyl bearing at least one sulfo, carboxy or phosphato substituent and having further optional substituents other than amino or substituted amino; or

R^3 and R^4 together with the nitrogen atom to which they are attached represent an optionally substituted 5- or 6-membered aliphatic or aromatic ring;

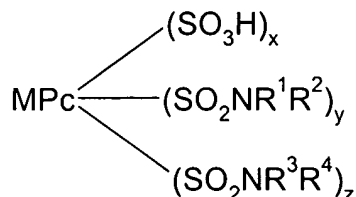
x is 0.1 to 3.8;

y is 0.1 to 3.8;

z is 0.1 to 3.8;

the sum of (x+y+z) is 4; and the substituents, represented by x, y and z, are attached only to a β -position on the phthalocyanine ring and the mixture of phthalocyanine dyes of Formula (1) are prepared by a process which comprises cyclisation of appropriate β -sulfo substituted phthalic acid, phthalonitrile, iminoisoindoline, phthalic anhydride, phthalimide or phthalamide optionally in the presence of a suitable nitrogen source (~~if required~~), a copper or nickel salt and a base followed by chlorination and then amination/amidation and provided that the mixture of dyes is free from fiber reactive groups.

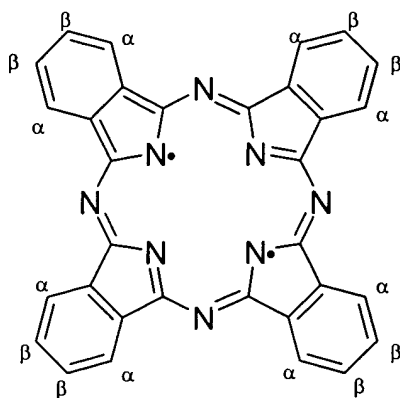
27. (currently amended): A mixture of dyes according to either claim 25 or claim 26 of Formula (2) and salts thereof:



Formula (2)

wherein:

M is Cu;
Pc represents a phthalocyanine nucleus of formula;



R^1 , R^2 and R^3 independently are H or methyl;

R^4 is phenyl bearing at least one sulfo, carboxy or phosphato substituent and having further optional substituents other than amino or substituted amino;

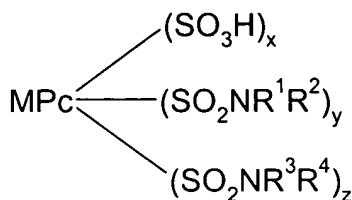
x is 0.5 to 3.5;

y is 0.5 to 3.5;

z is 0.5 to 3.5;

the sum of (x+y+z) is 4; and the substituents, represented by x, y and z, are attached only to a β -position on the phthalocyanine ring and the mixture of phthalocyanine dyes of Formula (1) are prepared by a process which comprises cyclisation of appropriate β -sulfo substituted phthalic acid, phthalonitrile, iminoisoindoline, phthalic anhydride, phthalimide or phthalamide in the presence of a suitable nitrogen source (if required), a copper or nickel salt and a base followed by chlorination and then amination/amidation and provided that the mixture of dyes is free from fiber reactive groups.

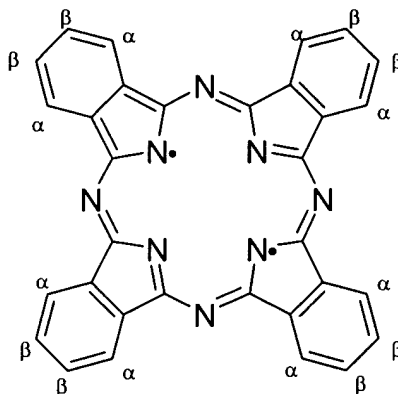
28. (original): A mixture of dyes according to either claim 25 or claim 26 of Formula (3) and salts thereof:



Formula (3)

wherein:

M is Cu;
Pc represents a phthalocyanine nucleus of formula;



R^1 and R^2 independently are H or methyl;

R^3 and R^4 independently are C_{1-4} alkyl bearing at least one acid substituent, selected from the group consisting of $-SO_3H$, $-COOH$ or $-PO_3H_2$;

x is 0.5 to 3.5;

y is 0.5 to 3.5;

z is 0.5 to 3.5;

the sum of (x+y+z) is 4; and the substituents, represented by x, y and z, are attached only to a β -position on the phthalocyanine ring and the mixture of phthalocyanine dyes of Formula (1) are prepared by a process which comprises cyclisation of appropriate β -sulfo substituted phthalic acid, phthalonitrile, iminoisoindoline, phthalic anhydride, phthalimide or phthalamide in the presence of a suitable nitrogen source (if required), a copper or nickel salt and a base followed by chlorination and then amination/amidation.

29. (previously presented): A mixture of dyes according to claim 25 or claim 26 wherein R^1 and R^2 are H.

30. (currently amended): A mixture of dyes according to either claim 25 or claim 26 wherein R^1 , R^2 and R^3 are H[,] and R^4 is $-CH_2CH_2SO_3H$ and ~~y is less than 1.~~

31. (original): A mixture of dyes according to either claim 25 or claim 26 wherein R^1 is H, R^2 is CH_3 , R^3 is H and R^4 is $-CH_2CH_2SO_3H$.

32. (original): A mixture of dyes according to either claim 25 or claim 26 wherein R^1 and R^2 are CH_3 , R^3 is H and R^4 is $-CH_2CH_2SO_3H$.

33. (currently amended): A mixture of dyes according to either claim 25 or claim 26 wherein R^1 and R^2 independently are H or methyl and R^3 and R^4 together with the nitrogen atom to which they are attached represent an optionally substituted ~~3 to 8~~ 5- or 6-membered aliphatic or aromatic ring.

34. (canceled)

35. (previously presented): A composition which comprises a major dye component which is a mixture of phthalocyanine dyes of Formula (4), as defined in claim 25 or claim 26, and water.

36. (original): A composition according to claim 35 which is an ink suitable for use in an ink-jet printer.

37. (original): A process for forming an image on a substrate comprising applying a composition according to claim 24 or claim 36 thereto by means of an ink-jet printer.

38. (previously presented): A material printed with a composition according to claim 1.

39. (previously presented): A material according to claim 38 which is a photograph printed using an ink-jet printer.

40. (original): An ink-jet printer cartridge comprising a chamber and an ink wherein the ink is in the chamber and the ink is according to claim 24 or claim 36.